



Bull Case: NXP Semiconductors

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Why we are Bullish

Thank You.

Questions?

Company Description

NXP Semiconductors is one of the largest semiconductor companies in the world, with over 50 years of innovation and operating history.

They are the manufacturers and suppliers of semiconductors for several end-markets, including Automotive, Industrial and Internet of Things, Mobile, and Communications.

Operates on a merchant (IDM) model in which they manufacture, design, and sell chips.



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NXPI Competitive Differentiation



- NXP Semiconductors is the largest supplier of semiconductors for the automotive market (13% Share)
- Manufactures of broad-line (majority Non-Specialized)
- Though a competitor in 5G, dominant market share goes to industry peers

End Market	Percent 2018 Revenue	2018A – 2021E 3-yr. CAGR
Automotive	48%	Up 7 to 10%
Industrial & IoT	19%	Up 8 to 11%
Mobile	12%	Up 4 to 6%
Comm. Infra. & Other	19%	0 to up 2%
Total		Up 5 - 7%

2017-2020 Automotive Industry Growth Estimates	CAGR
Advanced Driver Assistance Systems	23.60%
Body and Instruments	12.50%
Power Train	3.40%
Safety	2.60%

2017-2020 Industry Growth Estimates	CAGR
Security and Other Industrial	17.50%
Automation	11.20%
SS Lighting	12.14%
Commercial/ Medical/ Measurement	3.80%

Industry Comparative Analysis

Preface

- There's a lot of detail about semiconductors that we are not going to cover in a Bull/Bear Case
- Semiconductors and their application vary wildly in purpose, function, and capacity, and manufacture
- Ticker symbol comparisons are not one-to-one

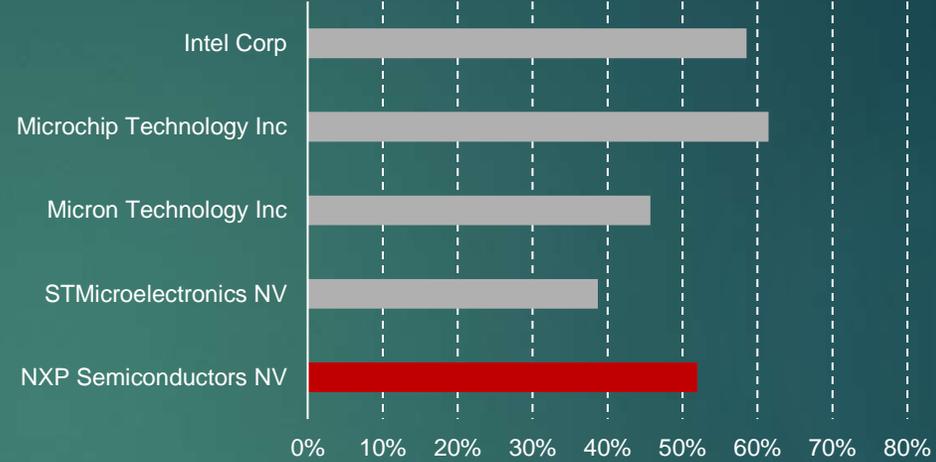


Industry Comparative Analysis

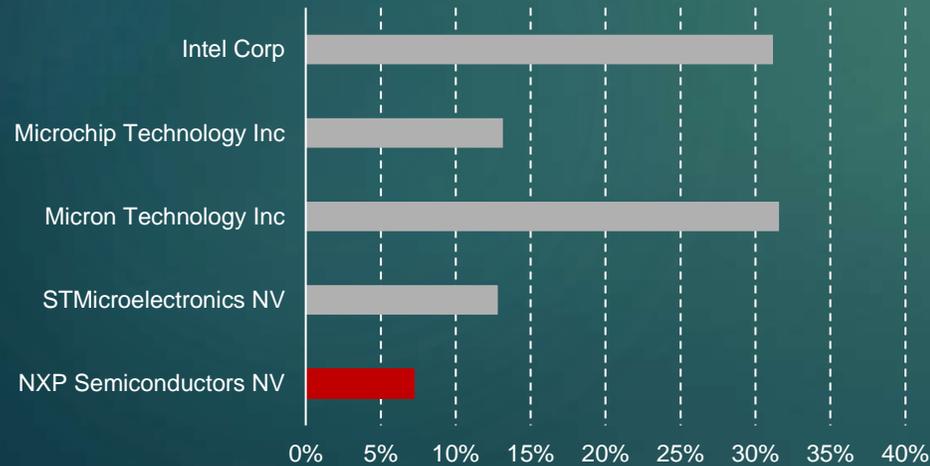
Revenues



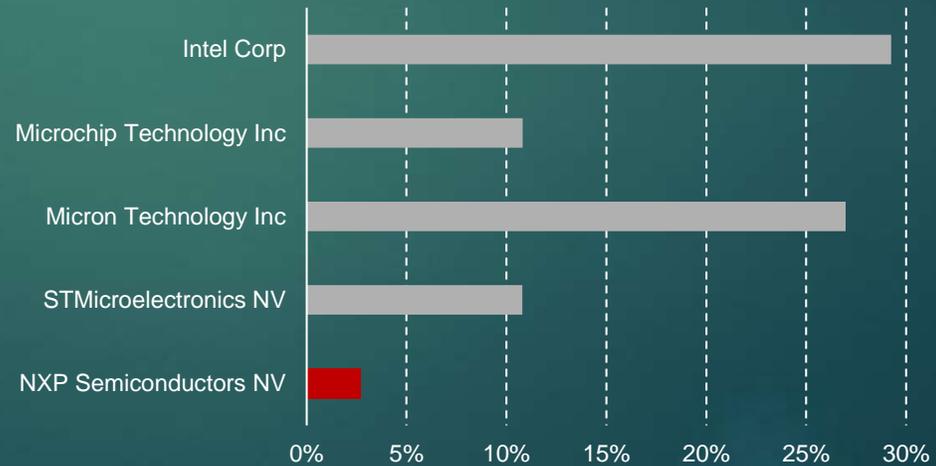
Gross Margin



Operating Margin

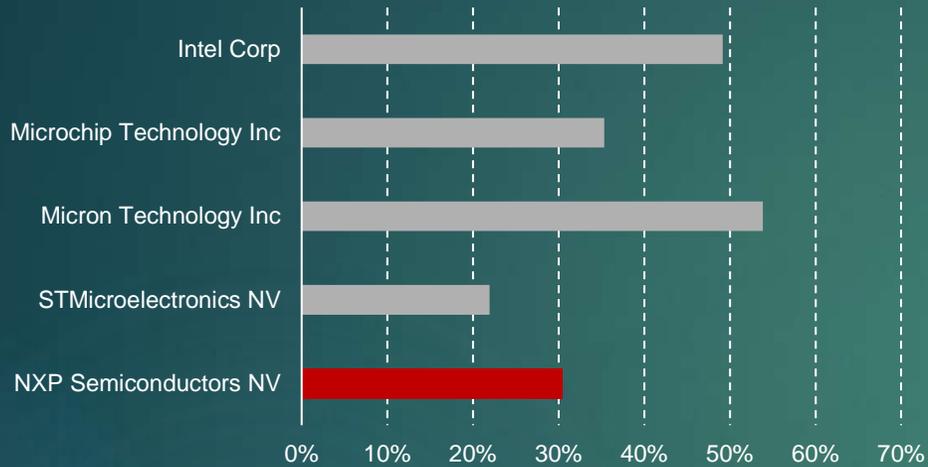


Net Margin

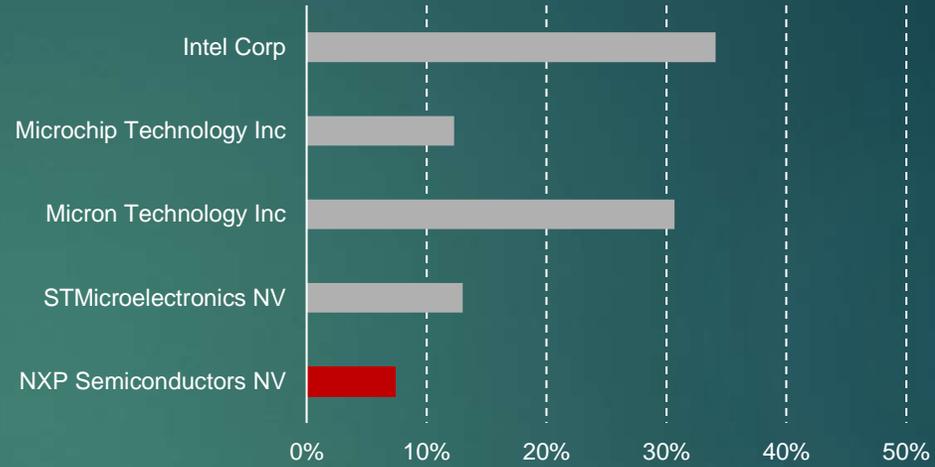


Industry Comparative Analysis

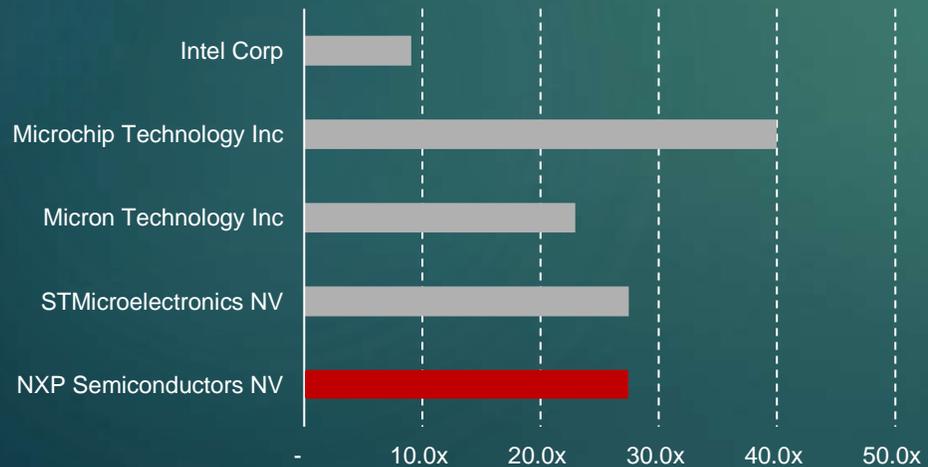
EBITDA Margin



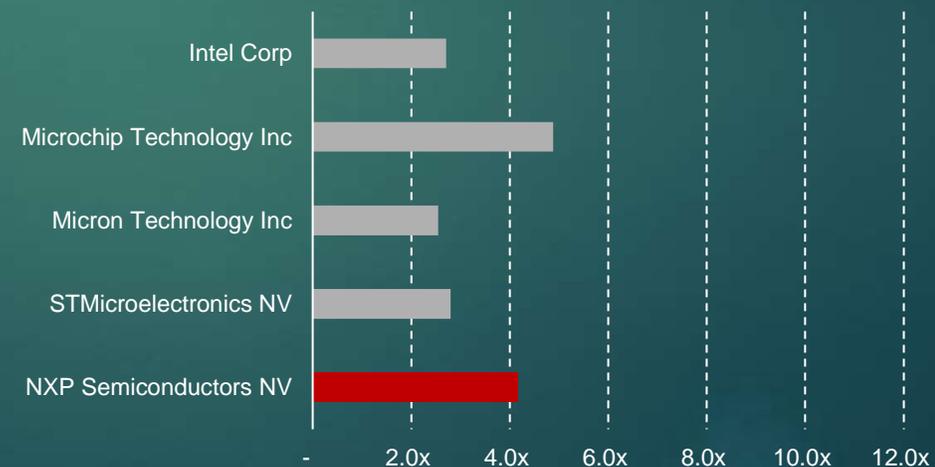
EBIT Margin



Price to Earnings



Price to Sales



Economic Moat Analysis



Intangible Assets

- Diverse array of products in the automotive market



- Unique analog chip and microprocessor designs



- Industry expertise in the automotive market



Switching Costs

- Demanding quality requirements in automotive market



- Safety standards make it a big risk for an OEM or supplier to switch to a cheaper product



- Once a semiconductor has been designed in, it is likely to remain in for the duration of the design life cycle



Market Share

- Customer retention due to switching costs has put them in favorable position in their industry



- 13% market share in automotive industry (more than any other player)



- Benefit from the increasing amount of electronic content in automobiles



Secular Growth Drivers



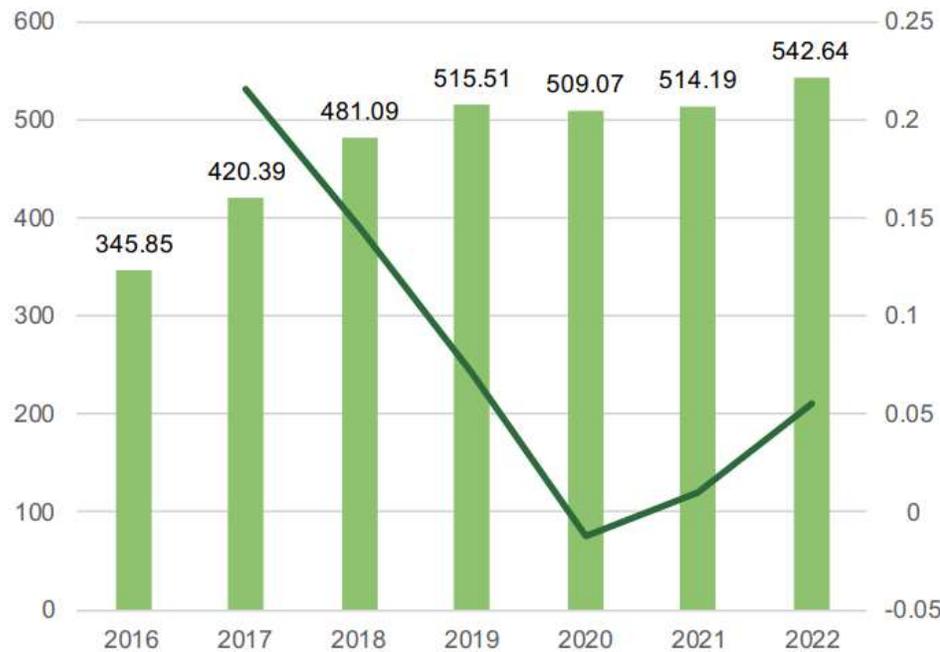
Secular tailwinds behind the growth of self-driving cars, the movement towards hybrid and electric vehicles,

Likely to benefit from the secular growth trends in the broader industrial market: connectivity, efficiency, and safety. The firm's technologies for radio frequency power and embedded processors should allow it to capture major tailwinds from 5G and the "Internet of Things."

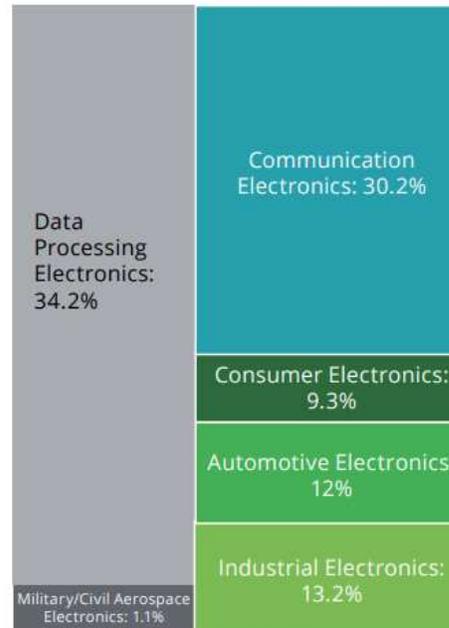
High growth from the firm's industrial and Internet of Things products, where a combination of products supporting factory automation, improved media processing, and end-node connectivity will enable high-single-digit growth

Secular Growth Drivers

Figure: Global semiconductor sales revenue (2016-2022, billion USD)



542.64 billion (2022)



Source: Gartner, Deloitte analysis

Automotive electronics and industrial electronics are expected to be the fastest growing markets in the semiconductor industry, Automotive being an area where NXPI derives a significant portion of revenues

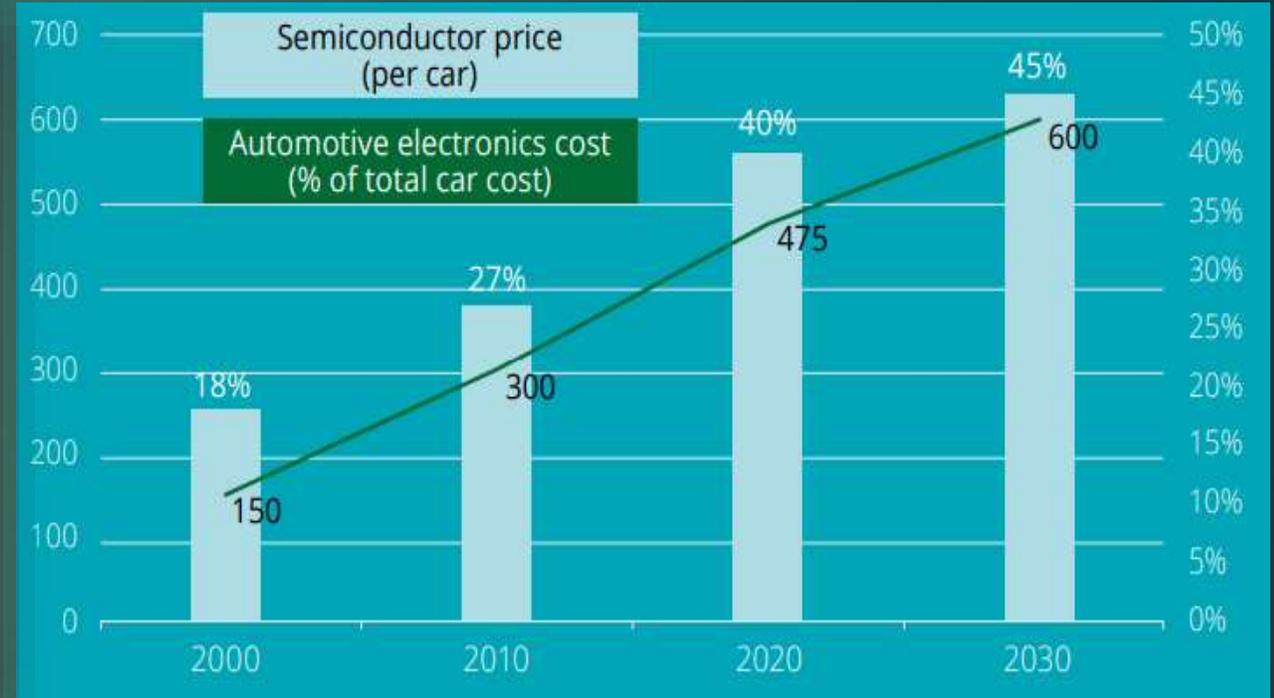
Industry wide Semiconductor sales growth averages 7.2% CAGR

NXPI Specific Growth Drivers

Automotive	Industrial and IoT	Mobile Devices	Communication
proliferation of electronic content in the automotive market will be one of the major growth drivers, and we expect sales from the segment (which currently accounts for nearly 50% of total revenue) to grow at an average rate of 8% during the same period.	anticipates even stronger growth from the firm's industrial and Internet of Things products, where a combination of products supporting factory automation, improved media processing, and end-node connectivity will enable high-single-digit growth	expect mid-single-digit growth from the firm's mobile device segment	flattish growth from the firm's communications infrastructure business

NXPI Specific Growth Drivers

The automotive industry has come a long way in terms of providing factory-installed electronics meant for safety and comforts.



Capital Structure/Obligations

Obligation Ratio

+ (LT Debt + ST Debt)	\$9,353
+ Leases *7	\$43 *7 = \$301
+Pension Shortfall	\$203
+Preferred Stock	None
- Cash Assets	\$3,226

Sum/Net Income \$6,631/1,280 = **5.15**

Debt Maturities

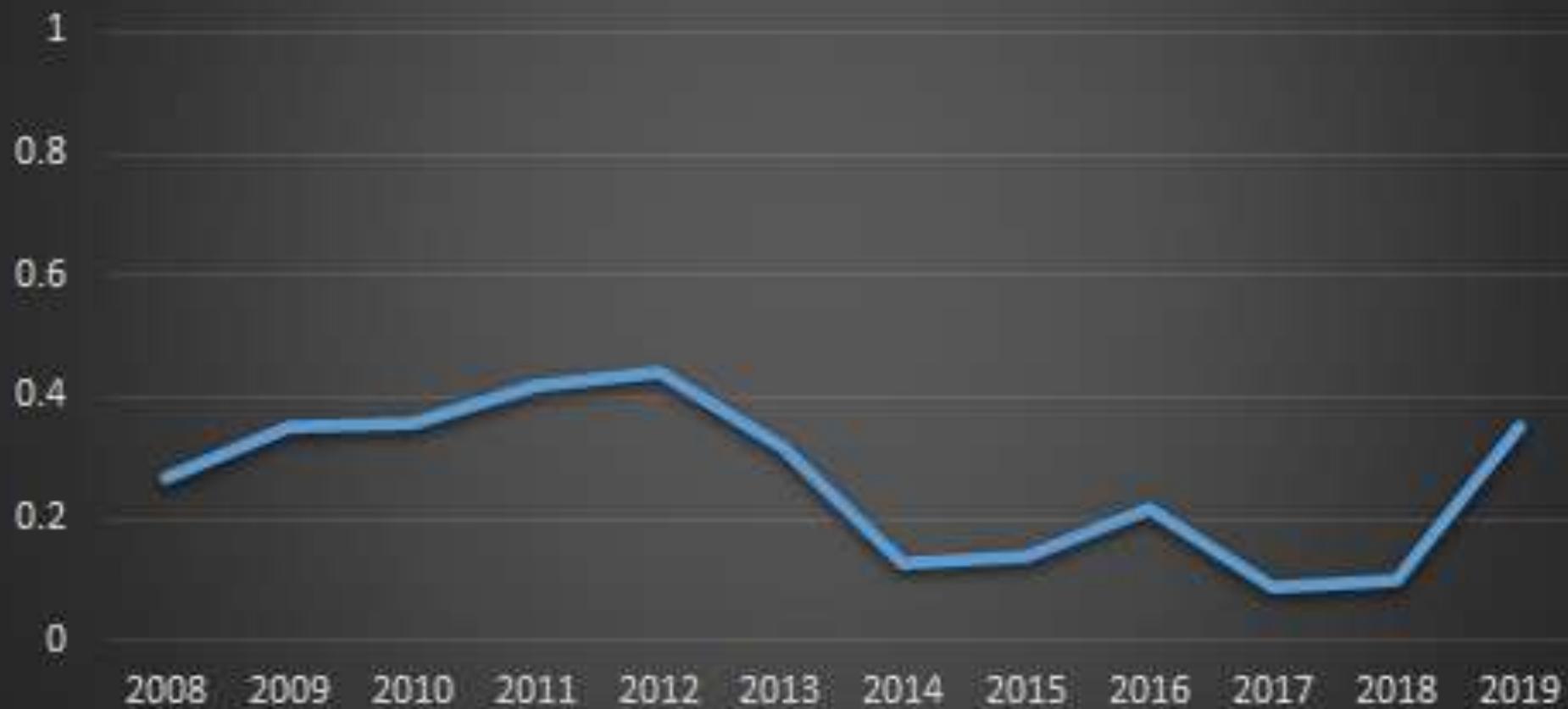
Debt Summary End of 2Q20¹

Debt Instrument	Sr. Unsecured Notes	Revolving Credit Facility											
Maturity Date	Jun-21	Jun-22	Sep-22	Jun-23	Mar-24	May-25	Mar-26	Jun-26	May-27	Dec-28	Jun-29	May-30	Jun-24
Amount (\$M)	\$1,350	\$400	\$1,000	\$900	\$1,000	\$500	\$500	\$750	\$500	\$500	\$1,000	\$1,000	\$0
Coupon	4.125%	4.625%	3.875%	4.625%	4.875%	2.700%	5.350%	3.875%	3.150%	5.550%	4.300%	3.40%	Libor + 125 bps
Rating													
Moody's	Baa3	NR											
Standard & Poor's	BBB	NR											
Fitch	BBB-	NR											

Total Leverage	
Total Debt (\$M)	\$ 9,353
Total Cash (\$M)	\$ 3,266
Net Debt (\$M)	\$ 6,087
TTM Adj. EBITDA	\$ 2,802
Cost of Debt	4.18%
Reported Leverage	2.2X
TTM Adj. EBITDA/TTM net interest	8.5x



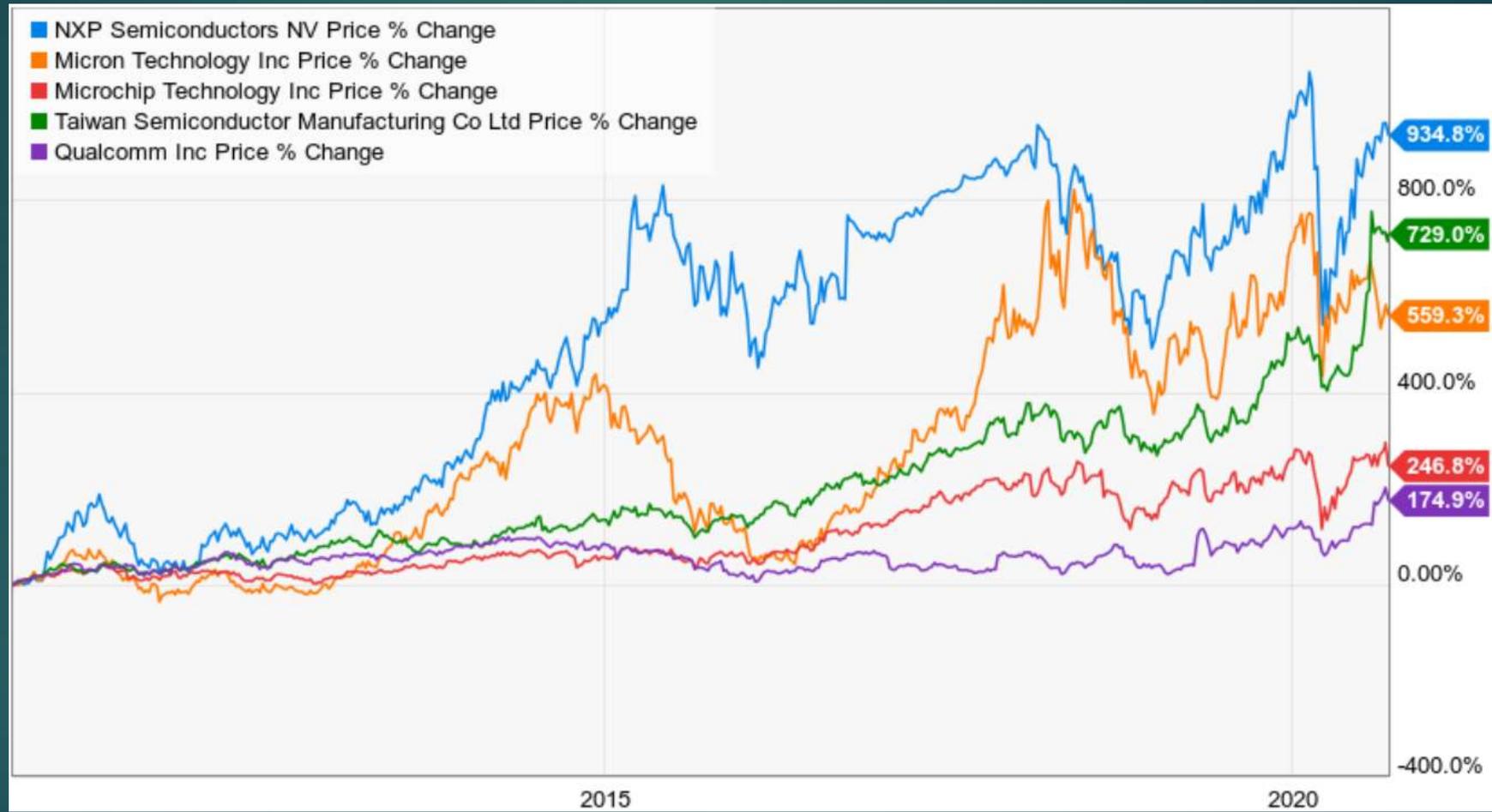
Interest Expense to Operating Income



New Debt to Free Cash Flow



Stewardship, Returns to Shareholders



Stewardship, Returns to Shareholders



Yacktman Forward Rate of Return

$$\begin{aligned} \text{FCF Yield} &= \$427\text{M (FCF)} / \$36,440\text{M (Market Cap)} = 0.01\% \\ &+ \\ &\text{Inflation} = 2.50\% \\ &+ \\ &\text{Free Cash Flow Growth} = 8.00\% \\ &+ \\ \text{Yacktman Forward Rate of Return} &= \mathbf{10.51\%} \end{aligned}$$

Discounted Cash Flows

Bear

Base

Bull

User Defined DCF: Default

Fair Value	\$ 65.60
Margin Of Safety	-91.16%
Stock Price	\$ 125.40

Based on EPS w/o NRI FCF \$4.6

Discount Rate: 10

Tangible Book Value (Add to Fair Value) 4.6

Growth Stage		Terminal Stage	
Years	10	Years	10
Growth Rate	7	Growth Rate	4
Growth Value	\$ 39.63	Terminal Value	\$ 25.96

Business Predictability: ★★★★★

User Defined DCF: Default

Fair Value	\$ 75.00
Margin Of Safety	-64.13%
Stock Price	\$ 123.10

Based on EPS w/o NRI FCF \$4.6

Discount Rate: 10

Tangible Book Value (Add to Fair Value) \$ -14.00

Growth Stage		Terminal Stage	
Years	10	Years	10
Growth Rate	9	Growth Rate	4
Growth Value	\$ 43.76	Terminal Value	\$ 31.24

Business Predictability: ★★★★★

User Defined DCF: Default

Fair Value	\$ 91.85
Margin Of Safety	-34.02%
Stock Price	\$ 123.10

Based on EPS w/o NRI FCF \$4.6

Discount Rate: 10

Tangible Book Value (Add to Fair Value) \$ -14.00

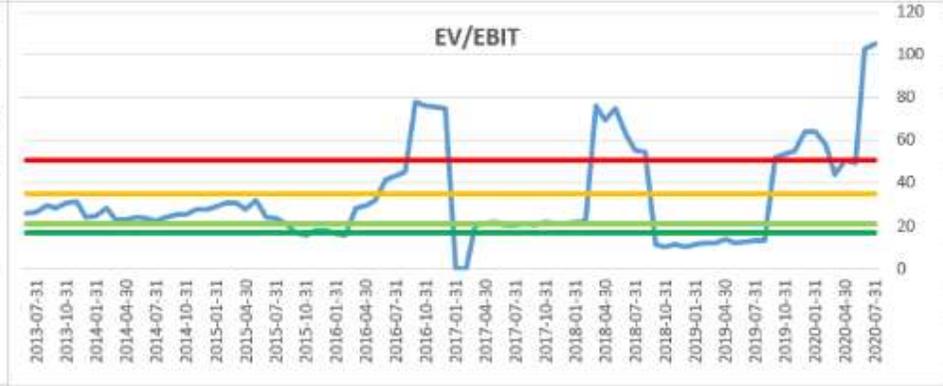
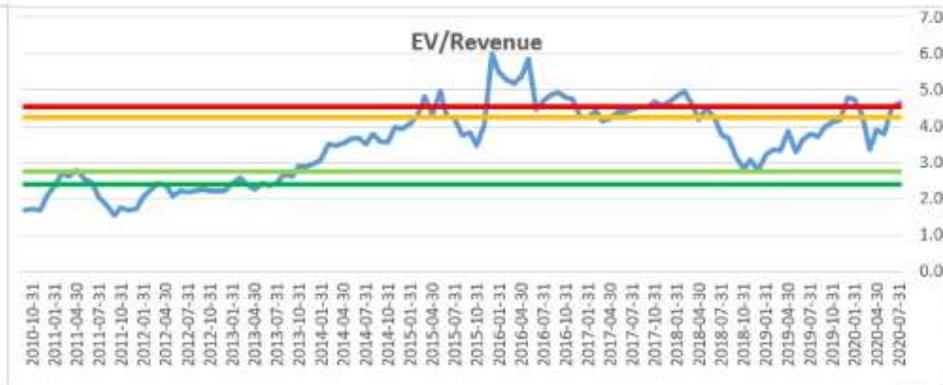
Growth Stage		Terminal Stage	
Years	10	Years	10
Growth Rate	12	Growth Rate	4
Growth Value	\$ 50.86	Terminal Value	\$ 40.99

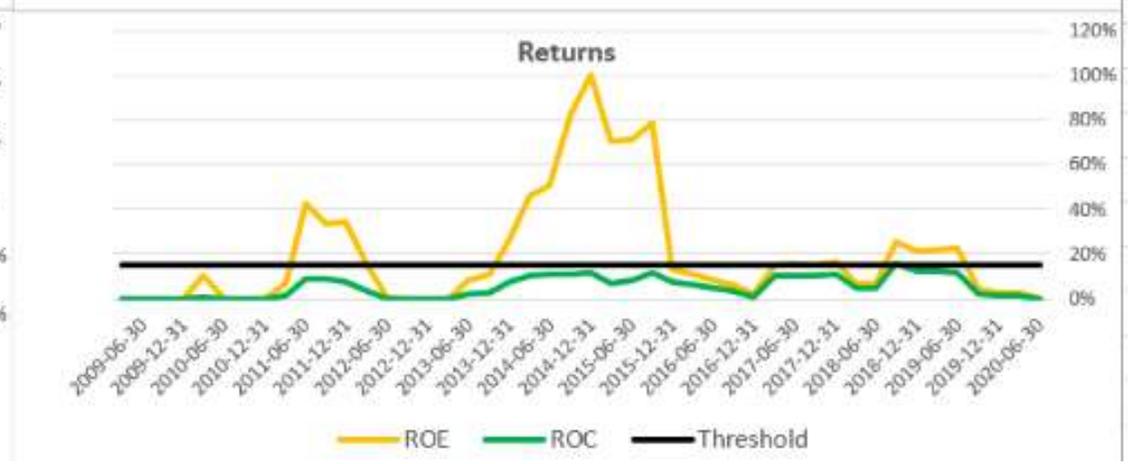
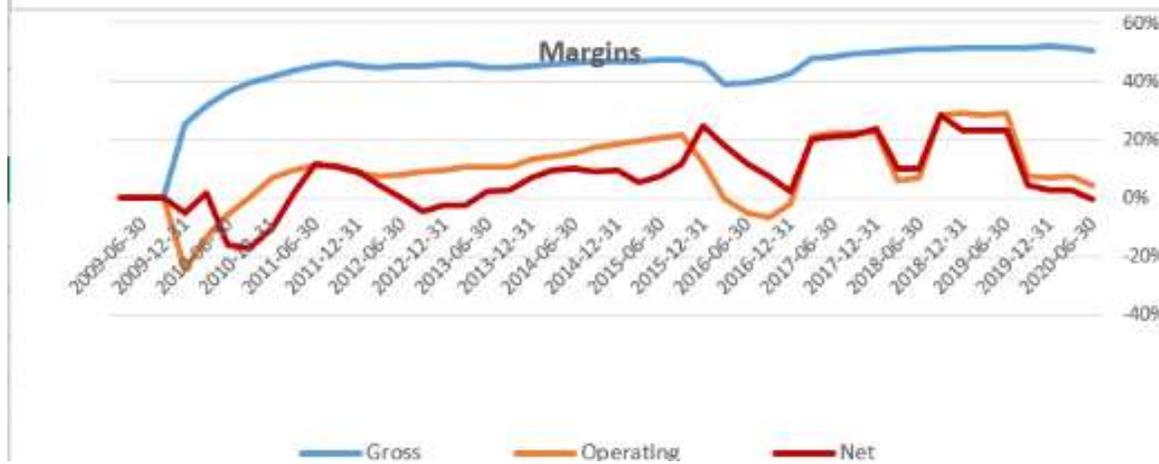
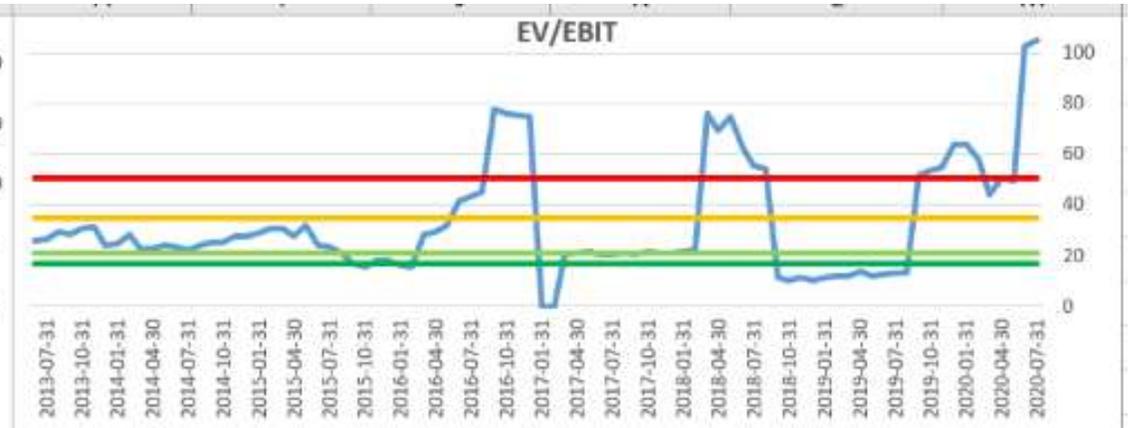
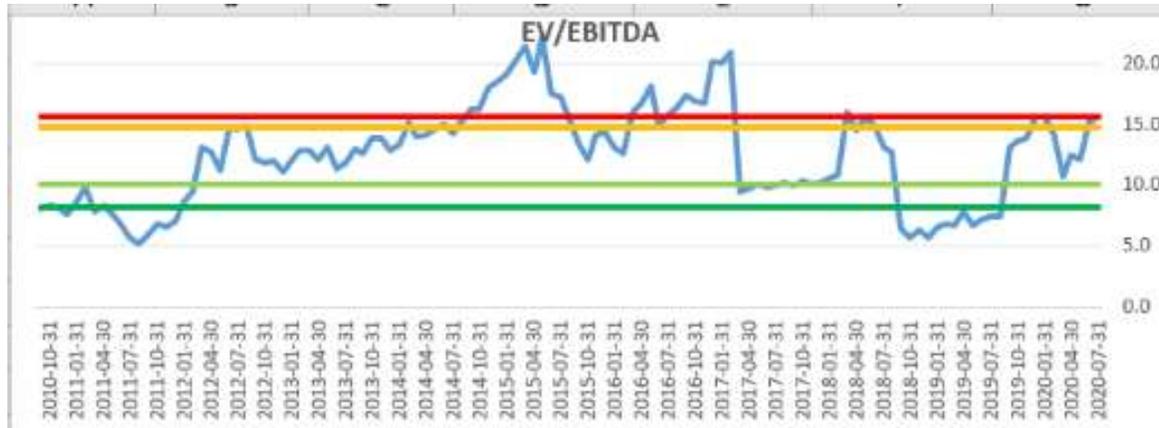
Business Predictability: ★★★★★

Value Bands

Ticker:	NXPI		P/S	P/OE	P/E - \$	P/E	P/B	P/CFO	P/FCF	EV/Rev	EV/EBITDA	EV/EBIT
Name:	NXP Semiconductors f		3.9	92.2			3.6	13.1	17.4	4.6	15.6	105.2
Price:	\$115.69		81%	77%	#VALUE!	#VALUE!	71%	37%	23%	84%	81%	97%
Full Value:	\$120		\$114	\$143		-\$6	\$173	\$146	\$159	\$118	\$118	\$118
P/FV	96%		10Y PEG	5Y PEG	Est. PEG	Fwd. P/E	Shiller P/E	Industry P/E	Div Yield	Obligation	Share Count 5Y	10Y
Date:	7/31/2020		#VALUE!	#VALUE!	#VALUE!	17.0	52.1		1.3%	-779.4Y	+20%	+12%



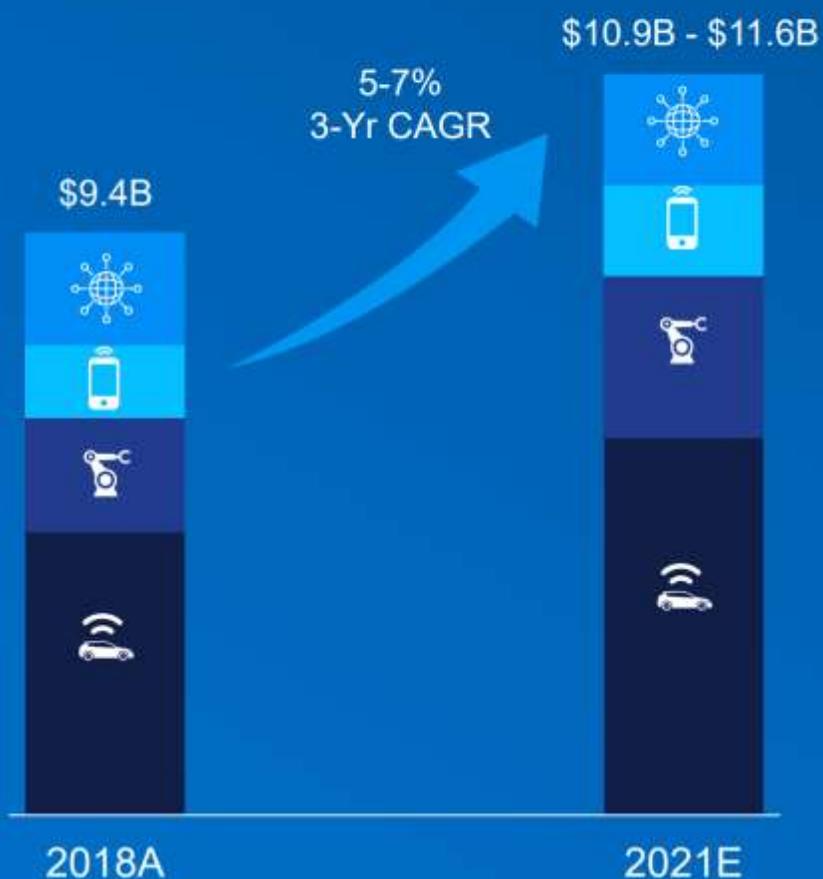




Appendix

Growth Opportunity Driven by Focus End Markets¹

Growth by End Market



End Market	Percent 2018 Revenue	2018A – 2021E 3-yr. CAGR
Automotive	48%	Up 7 to 10%
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Total		Up 5 - 7%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '17-'19 to '23-'25
Revenues	--	8.0%	9.5%
"Cash Flow"	--	28.0%	7.0%
Earnings	--	27.5%	9.0%
Dividends	--	--	35.0%
Book Value	--	53.0%	2.0%



Sino-US Trade war

The hardest hit sector in the trade war will be semiconductors, where the US imports USD2.5 billion worth of goods a year.

Figure: China imports: IC chips vs Crude Oil

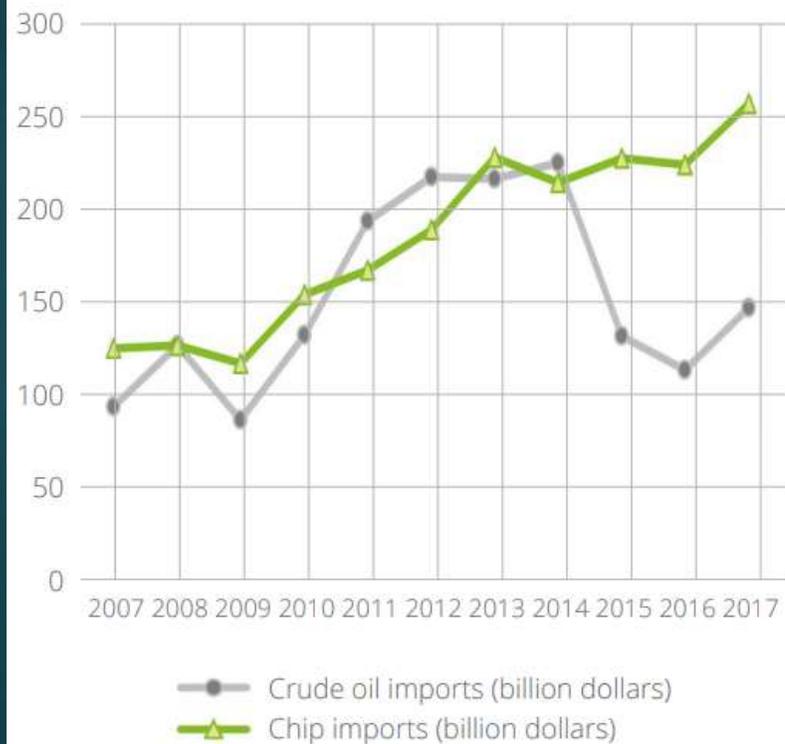


Figure: US deficits with China

